

Title (en)

System for enhancing cornering performance of a vehicle equipped with a stability control system

Title (de)

System zur Verbesserung der Kurvenfahrleistung eines Fahrzeugs, das mit einem Stabilitätskontrollsystem ausgerüstet ist

Title (fr)

Système pour améliorer la performance de virage pour un véhicule équipé d'un système de contrôle de la stabilité

Publication

EP 2289745 A1 20110302 (EN)

Application

EP 09425332 A 20090827

Priority

EP 09425332 A 20090827

Abstract (en)

A system (4) for controlling a vehicle (1) having a brake assembly (3) for exerting braking force on at least one wheel (2) on the basis of a number of control parameters. The system (4) has a vehicle stability control system configured to generate the control parameters (Pi) as a function of a control quantity (#P) associated with the intensity of the braking force to be exerted on the wheels; and a vehicle handling enhancement system (10) configured to calculate, in the presence of cornering acceleration of the vehicle, a reference vehicle yaw rate ($\dot{\epsilon}_{REF}$) on the basis of at least the longitudinal velocity (v_1) of the vehicle (1) and the steer angle (δ) of the vehicle (1), and to adjust the control quantity (#P) to zero the difference between the actual yaw rate ($\dot{\epsilon}$) and the reference vehicle yaw rate ($\dot{\epsilon}_{REF}$).

IPC 8 full level

B60T 8/1755 (2006.01)

CPC (source: EP US)

B60T 8/1755 (2013.01 - EP US); **B60T 2201/16** (2013.01 - EP US)

Citation (search report)

- [X] GB 2308167 A 19970618 - FUJII HEAVY IND LTD [JP]
- [X] DE 10328685 A1 20050113 - DAIMLER CHRYSLER AG [DE]
- [I] EP 1522475 A2 20050413 - FUJII HEAVY IND LTD [JP]
- [X] DE 3943860 B4 20050915 - AISIN SEIKI [JP]

Cited by

CN104837691A; WO2014086646A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2289745 A1 20110302; **EP 2289745 B1 20121010**; ES 2398875 T3 20130322; US 2011054738 A1 20110303; US 8660750 B2 20140225

DOCDB simple family (application)

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